In The Claims

Please replace claims 1 and 13 as shown below. A marked up version of the amended claims is attached to this Amendment.

B1

1. (Once Amended) A vortex inhibitor for molten metal pouring from a discharge nozzle comprising:

a uniform castable refractory body having a generally tapering shape along a longitudinal axis from a base toward a narrow end and a hollow chamber positioned longitudinally to the body extending within the body; and

an elongated sacrificial member constructed to dissolve before substantially obstructing the discharge nozzle and retained by the hollow chamber to form an integral body;

whereby the integral body combining the refractory body and the sacrificial member has a specific gravity less than the specific gravity of molten metal, and is self-orienting in a narrow end downward position when supported in molten metal.

B2

13. (Once Amended) A vortex inhibitor for molten metal pouring from a discharge nozzle comprising:

a uniform castable refractory body having a generally tapering shape along a longitudinal axis from a base toward a narrow end and a shaft positioned longitudinally to the body extending within the body; and

an elongated sacrificial member constructed to dissolve before substantially obstructing the discharge nozzle and retained by the shaft to form an integral body;

whereby the integral body combining the refractory body and the sacrificial member has a specific gravity less than the specific gravity of molten metal, and is self-orienting in a narrow end downward position when supported in molten metal.

Please add claims 26-35 as follows.

B3

26. (New) A method for improving yield of molten metal poured from a discharge nozzle of a metal pouring vessel, the method comprising:

introducing a vortex inhibitor having a uniform castable refractory body having a generally tapering shape along a longitudinal axis from a base toward a narrow end and a hollow chamber longitudinally to the body extending within the body and an elongated sacrificial member retained by the hollow chamber to form an integral body, whereby the integral body combining the refractory body and the sacrificial member has a specific gravity less than the specific gravity of molten metal, and is self-orienting in a narrow end downward position when supported in molten metal; and

maintaining the vortex inhibitor in the metal pouring vessel during at least a portion of the metal pour, while dissolving the elongated sacrificial member before substantially obstructing the discharge nozzle.

27. (New) The method of claim 26 wherein said dissolving step occurs before discharge of molten metal is terminated.

28. (New) The method of claim 26 wherein said dissolving step occurs before the discharge nozzle is closed.

29. (New) The method of claim 26 wherein said dissolving step occurs before entering the discharge nozzle.

30. (New) The vortex inhibitor of claim 1 wherein the elongated sacrificial member dissolves before discharge of molten metal is terminated.

31. (New) The vortex inhibitor of claim 1 wherein the elongated sacrificial member dissolves before the discharge nozzle is closed.

32. (New) The vortex inhibitor of claim 1 wherein the elongated sacrificial member dissolves before entering the discharge nozzle.

33. (New) The vortex inhibitor of claim 13 wherein the elongated sacrificial member dissolves before discharge of molten metal is terminated.

34. (New) The vortex inhibitor of claim 13 wherein the elongated sacrificial member dissolves before the discharge nozzle is closed.

35. (New) The vortex inhibitor of claim 13 wherein the elongated sacrificial member dissolves before entering the discharge nozzle.